

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION**

ORDER NO. 93-129

**SITE CLEANUP REQUIREMENTS FOR:**

ALAMEDA NAVAL AIR STATION  
ALAMEDA NAVAL AIR STATION SKEET AND TRAP CLUB  
ALAMEDA, ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. **Site Description** - The Alameda Naval Air Station (hereinafter called the Discharger) operated a skeet and trap club at the station. The club is located on the west side of the City of Alameda, adjacent to San Francisco Bay and near the northwest tip of the city (see Figure 1).
2. **Site History** - The club had been in operation for about 30 to 40 years, but shooting ceased in April 1993. There are signs posted stating that no lead shot is to be used at the club, and it is the intention of the Discharger to eliminate any further discharge of lead into the bay.
3. **Sources of Pollution** - There are two shooting ranges, each with skeet and trap apparatus. The shooting positions are about 100 feet from the bay and face west toward San Francisco. The pellets can land a considerable distance, 300 to 400 feet, from the shooting positions. At this time, no estimate can be given of how much lead is in the bay. Broken clay targets also have been deposited into the bay.
4. **Environmental Concerns** - The two primary areas of concern are lead and clay target deposition. The potential effects of lead from shotgun clubs are well documented. Direct ingestion of lead pellets causes waterfowl deaths. In the San Francisco Bay area, dabbling ducks are at special risk. In both fresh and marine water, lead becomes available to biota through the transformation process of oxidation. Clay targets contain asphaltenes, which in turn can contain polynuclear aromatic hydrocarbons. These types of hydrocarbons are classified as carcinogenic.
5. **Scope of this Order** - This Order contains prohibitions and tasks that require the Discharger to: 1) cease the deposition of lead shot into waters of the State or waters of the United States; 2) define the extent of lead pollution in waters of the State or waters of the United States; 3) determine the degree to which the lead is biologically available; 4) develop a remedial action plan to cleanup or manage the lead pollution; and 5) implement the remedial action plan.

6. On October 28, 1968, the State Board adopted Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality Waters in California." This policy calls for maintaining the existing high quality of State waters unless it is demonstrated that any change would be consistent with the maximum public benefit and not unreasonably affect beneficial uses. The discharge of waste to the surface water at this site is in violation of this policy. Therefore, the surface water quality needs to be restored to its original quality to the extent reasonable.
7. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on September 16, 1992. The Basin Plan contains water quality objectives and beneficial uses for San Francisco Bay and contiguous surface waters.
8. The existing and potential beneficial uses of central San Francisco Bay and contiguous surface waters include:
  - a. Industrial service supply
  - b. Industrial process supply
  - c. Navigation
  - d. Water contact recreation
  - e. Non-contact water recreation
  - f. Ocean commercial and sport fishing
  - g. Wildlife habitat
  - h. Preservation of rare and endangered species
  - i. Fish migration
  - j. Fish spawning
  - k. Shellfish harvesting
  - l. Estuarine habitat
9. The Discharger has caused or permitted, and threatens to cause or permit, waste to be discharged or deposited where it is or probably will be discharged to waters of the State and creates a condition of pollution or nuisance.
10. This action is an Order to enforce the laws and regulations administered by the Board. This action is categorically exempt from the provisions of the CEQA pursuant to Section 15321 of the Resources Agency Guidelines.
11. The Board has notified the Discharger and interested agencies and persons of its intent under California Water Code Section 13304 to prescribe Site Cleanup Requirements for the discharge and has provided them with the opportunity for a public hearing and an opportunity to submit their written views and recommendations.

12. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that the Discharger shall cleanup and abate the effects described in the above findings as follows:

**A. PROHIBITIONS**

1. The discharge of wastes or hazardous materials in a manner which will degrade, or threaten to degrade, water quality or adversely affect, or threaten to adversely affect, the beneficial uses of the waters of the State or waters of the United States is prohibited.
2. Specifically, the discharge or deposition of lead shot into waters of the State or waters of the United States is prohibited.

**B. PROVISIONS**

1. The Discharger shall perform all investigation and cleanup work in accordance with the requirements of this Order. All technical reports submitted in compliance with this Order shall be satisfactory to the Executive Officer, and, if necessary, the Discharger may be required to submit additional information.
2. To comply with all Prohibitions of this Order, the Discharger shall meet the following compliance task and time schedule:

**COMPLIANCE DATE AND TASKS**

- a. **COMPLIANCE DATE: December 1, 1993**

**WORKPLAN FOR BIOLOGICAL CHARACTERIZATION:**

Submit a technical report acceptable to the Executive Officer containing a proposal, including a time schedule, to characterize the biology in the area where the lead has been deposited, and determine whether the lead has become biologically available and is affecting, or can potentially affect, plants or animals.

- b. **COMPLIANCE DATE:** To be established by Executive Officer based on proposal submitted pursuant to Provision 2.a.

**COMPLETION OF BIOLOGICAL CHARACTERIZATION:**

Submit a technical report acceptable to the Executive Officer documenting completion of the necessary tasks identified in the technical report acceptable for Provision 2.a.

- c. **COMPLIANCE DATE:** May 2, 1994

**WORKPLAN FOR SEDIMENT POLLUTION**

**CHARACTERIZATION:** Submit a technical report acceptable to the Executive Officer containing a proposal, including a time schedule, to define the horizontal and vertical extent of lead sediment pollution, including both pellet and finely divided forms.

- d. **COMPLIANCE DATE:** To be established by Executive Officer based on proposal submitted pursuant to Provision 2.c.

**COMPLETION OF SEDIMENT CHARACTERIZATION:**

Submit a technical report acceptable to the Executive Officer documenting completion of the necessary tasks identified in the technical report acceptable for Provision 2.c.

- e. **COMPLIANCE DATE:** To be established by Executive Officer based on reports submitted pursuant to Provisions 2.b. and 2.d.

**REMEDIAL ACTION PLAN:** Submit a technical report acceptable to the Executive Officer containing a remedial action plan and an implementation time schedule. This report shall evaluate the removal of lead deposits in San Francisco Bay and, possibly, the adjacent land areas. Removal evaluation shall consider pellet and sediment phases, and the degree of removal may be based on biological data.

- f. **COMPLIANCE DATE:** To be established by Executive Officer based on proposal submitted pursuant to Provision 2.e.

**COMPLETION OF REMEDIAL ACTION:** Submit a technical report acceptable to the Executive Officer documenting the completion

of the necessary tasks identified in the technical report acceptable for Provision 2.e.

3. If the Discharger is delayed, interrupted or prevented from meeting one or more of the compliance dates specified in this Order, the Discharger shall promptly notify the Executive Officer, and the Board may consider revision to this Order.
4. The Discharger shall file a report with the Board at least 30 days in advance of any changes in occupancy or ownership associated with the Site described in this Order.
5. The Board will review this Order periodically and may revise the requirements or compliance schedule when necessary.

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Region, on October 20, 1993.

  
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Steven R. Ritchie  
Executive Officer

Attachments: Figure 1 — Site Map

